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GUIDELINE D-5

Planning for Sewage & Water Services

Legislative Authority:

Environmental Protection Act
Ontario Water Resources Act
Planning Act

Responsible Director:

Director, Environmental Planning & Analysis Branch

Last Revision Date:

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SYNOPSIS

This document is intended to guide municipal planning for sewage and water servicing. It describes an approach for municipal planning for sewage and water services to ensure an acceptable quantity and quality of water supply and the proper collection, treatment and disposal of sewage wastewater for development. It is consistent with the Provincial goal to manage growth and change to foster communities that are socially, economically, environmentally, and culturally healthy, and that make efficient use of land, new and existing infrastructure and public service facilities.

1.0 INTRODUCTION

1.1 Purpose

This document is intended to guide municipal land use planning for sewage and water servicing such that planning decisions *shall have regard* to the Provincial Policy Statement under Section 3 of the Planning Act. This guideline describes an implementation approach for municipal planning for servicing and infrastructure with a particular focus on sewage and water services.

1.2 Rationale

The provincial interest in planning for services and infrastructure in land use planning is founded in the recognition that servicing and infrastructure provide support for development. In recognizing that servicing is inseparable from development, it follows that well-planned servicing leads to well-planned development and communities. Well-planned services can be built efficiently and used efficiently and avoid costs for later upgrading or rehabilitation that is common with poorly planned servicing. Planning for sewage and water services is particularly important to ensure that communities have a potable water supply and proper collection, treatment and disposal of sewage wastewater that protects the natural environment and public health. Planning for sewage and water services in land use planning allows the opportunity for servicing facilities to maintain or enhance the natural environment and accommodate expected growth in a manner that is cost effective and promotes efficient use of servicing facilities.

The Ministry of Environment and Energy has an interest in municipal

planning for sewage and water services which stems from the Ministry's mandate in administering the Environmental Protection Act, 1990, Ontario Water Resources Act, 1990, and Environmental Assessment Act, 1990. The Ministry's responsibilities under these Acts include the approval and compliance monitoring of sewage treatment and water supply facilities. In order to protect the natural environment and public health it is imperative that land use planning decisions be made in the knowledge that proposed development can be accommodated in the long-term with sufficient and appropriate sewage treatment and a sufficient potable water supply in accordance with standards under environmental legislation.

1.3 Objectives

The objectives of this implementation guideline are to advise municipalities to plan for sewage and water services which maintain or enhance the quality of the environment while accommodating expected growth by:

- planning for and directing development to areas where municipal water and sewage facilities are available, with sufficient uncommitted reserve capacity to service the proposed development or to areas where there has been a commitment to new services or the expansion of existing services (where services will be available at the time of development), in accordance with long-term planning as established through the principles of the Provincial Policy Statement;
- using communal water and sewage services where multi-lot/unit development is considered for areas without full municipal services to ensure the long-term viability of the services through municipal responsibility to protect the environment and public health; and
- determining, in the context of long-term planning and approved growth management objectives, that the consideration of development in areas without full municipal services is appropriate and site specific environmental and public health considerations are addressed.

2.0 POLICY EXPLANATION AND IMPLEMENTATION

2.1 Policy Explanation

2.1.1 Planning for Servicing and Infrastructure

Servicing and infrastructure are fundamental building blocks for development and have the potential to greatly impact the natural environment. "Infrastructure" refers to the physical structures that form the foundation for development including sewage and water works, waste management systems, electric power, communications, transit and transportation corridors and facilities, and oil and gas pipelines and associated facilities. "Servicing" describes the act or result of employing sewage and water facilities to meet the physical needs of development and the community.

It is important to anticipate servicing needs and potential environmental impacts when municipalities are making decisions about growth and how it should be accommodated. It is not only important for municipalities to consider the servicing needs within their own boundaries, but also to be aware and take into consideration the servicing needs of the Province as a whole. In reaching land use planning decisions municipalities should consider existing and planned provincially related infrastructure, such as hydroelectric, hydrocarbon, transit, transportation and communications corridors and facilities (see Policy Statements B5, B6, B16). For an explanation of the terms used in this guideline see the attached Appendix, *Glossary*.

2.1.2 Planning for Sewage and Water Services

An effective means of planning for sewage and water services used by many municipalities is the preparation of servicing strategies such as multi-year sewage and water servicing plans. The Ministry of the Environment and Energy recommends that municipalities with the responsibility for sewage and water servicing plan for such services by preparing multi-year sewage and water servicing plans as one component of planning for growth management and preparing official plan policy. It is recommended that servicing plans be done in support of revisions to, or in the creation of, an official plan or can be done in support of planning documents prepared for areas proposed for potential growth (eg.; secondary plan or subwatershed plan).

It is recommended that municipalities communicate with neighbouring municipalities, and their respective public utilities where applicable, to develop cooperative approaches to planning for and providing sewage and water services. In many circumstances the most appropriate planning scale for sewage and water servicing is the watershed and subwatershed. The better understood the interrelationship between sewage and water servicing and natural

water features and functions, the greater the efficiency of servicing over the long-term and the more effectively can the natural environment be maintained. In the interest of more comprehensive decision-making, municipalities may wish to take the opportunity to plan for servicing as one component of a broader planning exercise on a watershed/subwatershed scale.

Matters for consideration in the preparation of multi-year sewage and water servicing plans in conjunction with official plan policy include:

- investigate measures to resolve existing sewage or water problems within the municipality such as abatement of combined sewer overflows or addressing limitations to sewage collection/pumping stations and water distribution systems; and
- investigate servicing efficiency measures, such as the adoption of water conservation, toward reducing the demand on water supplies and treatment plant capacity; and
- address how the municipality intends to service anticipated growth and identify what the implications are for the sewage and water services and the need for new services; and
- account for the efficient use of available existing infrastructure by calculating and reporting on uncommitted reserve capacity for sewage and water treatment facilities and establish a monitoring program for future use of that capacity; and
- identify the physical and environmental constraints to development related to servicing; and
- adopt a hierarchy of servicing preferences as a guide for managing growth and settlement (see Section 2.1.3 of this guideline); and
- generally describe the type and level of water supply and sewage disposal services which would support municipal goals for environmental protection or enhancement, sustainability, urban intensification, and growth management in a manner which is efficient and cost effective; and
- draw conclusions regarding the principle of whether to permit development in areas outside existing full municipal services on the basis of:

- an evaluation of servicing options which includes the potential for full municipal services and communal services; and
- a determination of appropriate areas to target for growth on the basis of the servicing option available within the context of criteria outlined under the Provincial Policy Statement; and
- investigate and classify areas outside fully municipal serviced areas which may be targeted for growth by generally evaluating the potential growth areas according to their suitability for servicing. These servicing/environmental investigations (along with other planning concerns) should be the basis for municipalities to direct appropriate forms of development to areas least likely to suffer adverse environmental impacts. To confirm that the principle of development is appropriate, the investigations should be an overview based on a evaluation using existing information on environmental constraints which include soils, groundwater and surface water conditions and use, agricultural uses, storm water drainage, existing land uses, and environmental and physiographic features; and
- address the issue of residuals management including hauled sewage (septage) utilization/disposal in the case of septic tank systems and sludge utilization/disposal in the case of digested sludge.

NOTE 1: If a multi-year sewage and water servicing plan is completed according to the five key features of environmental planning (see Note 2, Procedure D-5-3) and the requirements of the municipal class environmental assessment process, MOEE will recognize and give credit for work done within the plan as part of future class environmental assessments (see Section 2.3, *Municipal Engineers Association Class Environmental Assessment for Water and Wastewater Projects*, 1993, and Section 16.1, *Planning Act*, 1995).

2.1.3 Hierarchy of Servicing Preferences

Official plans, in concert with sewage and water servicing plans, should adopt a hierarchy of servicing preferences which incorporate the principles in Section 2 of this guideline and are consistent with the Provincial Policy Statement as follows:

- development on full municipal services be the preferred mode of servicing where there is sufficient uncommitted reserve capacity or where there is the capability for full municipal services to be expanded;
- in areas lacking full municipal services, communal sewage and water services be the preferred mode of servicing multi-unit/lot development; and
- in areas lacking full municipal or communal services where development can be justified consistent with the Provincial Policy Statement, the use of individual on-site sewage and water services, may be considered subject to meeting environmental and public health requirements.

a) Full Municipal Services

- New development should be directed to settlement areas with existing full municipal services or to where there has been a commitment to new full municipal services consistent with the Provincial Policy Statement. Municipalities should anticipate and plan for needed sewage and water treatment capacity to accommodate municipal growth and development objectives through the adoption of conservation measures to extend existing capacity and/or the expansion of capacity.
- Accordingly, an integral part of planning for services is determining the status of uncommitted reserve capacity at water and sewage treatment facilities and monitoring this capacity on an on-going basis. Municipalities responsible for sewage and water servicing should assume responsibility for tracking, reporting and allocating uncommitted reserve capacity, in conjunction with water conservation measures to optimize the use of this capacity.
- Where a municipality has determined that it is appropriate, consistent with the Provincial Policy Statement, to accept the principle of multi-lot/unit development adjacent to settlement area boundaries or portions of hamlets, villages, towns, and cities which have existing full municipal sewage and water services, then full municipal services is the preferred method of servicing such development.¹(see Note 2)

¹ Note: Development on partial services (eg.: the provision of municipal water services in the absence of municipal sewage services) will generally be discouraged. Local circumstances such as the existing means and quality of servicing and physical constraints to servicing will be considered in determining whether partial services may be appropriate.

b) Communal Sewage and Water Services

- Where a municipality has determined that it is appropriate, consistent with the Provincial Policy Statement, to accept the principle of planned development in areas without existing full municipal services, the preferred method of servicing multi-lot/unit development is public communal sewage and water servicing (see Note 2).
- In preparing servicing plans or reviewing planning documents proposing development on communal services, municipalities should:
 - consider the potential, appropriateness and, if deemed necessary, the means of accommodating phased, multiple, or clustered development on communal services; and
 - designate areas for development proposed to be served by communal services based on an evaluation of environmental constraints that confirms that the principle of development is appropriate; and
 - plan to accept responsibility for public communal services for development proposing multi-lot/unit residential development (See Procedure D-5-2, *Application of Municipal Responsibility for Communal Sewage and Water Services*).

c) Individual On-site Sewage and Water Services

- In preparing servicing plans or reviewing proposals for development on individual on-site services in areas without full municipal services, municipalities should ensure that:
 - planned development can be justified consistent with the Comprehensive Set of Policy Statements; and
 - municipal official plans do not anticipate or identify the provision of municipal services; and
 - areas for development proposed to be served by individual on-site sewage and water services are designated based on an evaluation of environmental constraints that confirms that the principle of development is appropriate.

NOTE 2: Limited infill development on individual water supply and individual on-site sewage services within a settlement area may be considered only where there is no suitable

receiver for effluent discharge from a full municipal or communal sewage facility, there are no existing or potential water quality or quantity problems, and site conditions permit.

2.2 Implementation

Within the context of the principles outlined in this guideline, the planning authority should review planning documents circulated under the Planning Act as follows:

2.2.1 Official Plans

The planning approval authority should not recommend approval of new or revised official plans, without official plans identifying areas for growth through official plan policies and designations based on multi-year sewage and water servicing plans which have evaluated servicing options consistent with Sections 2.1.2 and 2.1.3.

2.2.2 Site-Specific Official Plan Amendment/Individual Application Review

For site-specific official plan amendments/individual applications that are submitted within the context of approved municipal planning documents which have incorporated planning for sewage and water services (consistent with the Provincial Policy Statement and as described in Sections 2.1.2 & 2.1.3 of this guideline) the following should be met:

a) Full Municipal Services

- for site-specific official plan amendments, the municipality demonstrate (e.g.; the proposal is in keeping with a municipal servicing strategy) to the approval authority that there will be sufficient uncommitted reserve sewage and water capacity available to service the proposed development (see Procedure D-5-1, *Calculating and Reporting on Uncommitted Reserve Capacity at Sewage and Water Treatment Plants, Sections 4.0 & 5.0*). For individual applications, the Province considers capacity to be committed when draft approval is granted to a

development in a fully serviced municipality.² In circumstances where capacity is tied to the construction of new or expanded treatment facilities, the capacity will be considered available once:

- Environmental Assessment Act approval has been given³; and,
- the municipal council responsible for financial decisions regarding sewage and water services has passed a council resolution approving a specific budget item that dedicates capital for the completion of facilities (such that the facilities are completed prior to the commencement of construction of development).

If a municipality brings forward a specific proposal for alternative approaches for calculating and reporting uncommitted reserve capacity, the MOEE Regional Office will consider entering into alternative arrangements (eg.; a development control agreement) with the municipality based on the merit of the proposal. Alternative approaches may be in regard to, for example, how the MOEE calculation is applied, use of an alternative calculation, or how a municipality allocates capacity.

b) Communal Sewage and Water Services

- an agreement for municipal ownership/responsibility for public communal services has been entered into between the developer and municipality for development proposing multi-lot/unit residential development (See Procedure D-5-2, *Application of Municipal Responsibility for Communal Sewage and Water Services*); and
- a terrain analysis and hydrogeological report or an assimilation capacity study have been completed in accordance with the requirements of the Environmental Protection Act and

² In accordance with section 51, Planning Act, 1995, the approval authority in giving approval to a draft plan of subdivision may provide that the approval lapse after a specified time period, and thus, the committed capacity be re-allocated. See also section 70.3, Planning Act, 1995, regarding municipal authority to pass by-laws to establish a system for allocating sewage and water services to land that is the subject of an application under section 51. It is appropriate that municipalities that wish to use this provision describe in official plan policy the process for lapsing and re-allocation.

³ Municipalities may wish to combine planning processes. Under Section 16(1) of the Planning Act municipalities may prepare an official plan or official plan amendment that may be considered under the Environmental Assessment Act with respect to any requirements under the Environmental Assessment Act, including the Municipal Engineers Association Class Environmental Assessment for Water and Wastewater Projects, 1993.

Ontario Water Resources Act which demonstrate that the proposal will not have an adverse effect upon the environment or public health⁴.

c) Individual On-site Sewage and Water Services

- a terrain analysis and hydrogeological report or an assimilation capacity study have been completed in accordance with the requirements of the Environmental Protection Act and Ontario Water Resources Act which demonstrate that the proposal will not have an adverse effect upon the environment or public health⁵.

Many municipalities have been given responsibilities under contract with the Province under Part VIII, Environmental Protection Act, RSO 1990, with respect to septic tanks and certain other sewage systems, including communal sewage systems which discharge to the subsurface. These responsibilities include (1) arranging for adequate inspection to be made of all parcels of land with respect to which an application for consent, plan of subdivision, minor variance, or plan of condominium is made which are not or will not be served by adequate sanitary sewers and (2) commenting to the body or person to whom such application is made on the suitability of such lands for sewage disposal. These responsibilities are often exercised by the Board of Health.

2.2.3 Site-Specific Official Plan Amendment/Individual Application Review in the Absence of Planning for Sewage and Water Services in Approved Municipal Planning Documents

In the absence of municipal planning for sewage and water services (as described in this guideline), the planning authority should not recommend approval for site-specific official plan amendments/individual planning applications proposing multi-lot/unit development, unless it is demonstrated that servicing

⁴ See: (1) Manual of Policy, Procedures and Guidelines for Private Sewage Disposal Systems, 1982
(2) An Introduction to Communal Sewage Systems, 1994
(3) MOEE Guideline B-7, Incorporation of The Reasonable Use Concept into MOEE Groundwater Management Activities

⁵ See: (1) Appendix E: Technical Guidelines for Septic Systems: Water Quality Impact Risk Assessment, March 1995
(2) Appendix F: Technical Guidelines for Private Wells: Water Supply Assessment, March 1995
(3) Manual of Policy, Procedures and Guidelines for Private Sewage Disposal Systems, 1982
(4) Ontario Regulation 358 under Part VIII, Environmental Protection Act, RSO 1990
(5) Ontario Regulation 903, Ontario Water Resources Act, RSO 1990

options have been investigated and reported by means of a Servicing Options Statement (see Procedure D-5-3, *Servicing Options Statement*). Servicing options include the potential for servicing development on full municipal services, communal sewage and water services, and individual on-site sewage and water services consistent with this policy.

For the purposes of this guideline multi-lot/unit development means more than five lots/units of residential, industrial, commercial or institutional development.

"More than Five lots/units" has been chosen because it is consistent with how environmental legislation defines what constitutes communal services under Sections 52 & 53, Ontario Water Resources Act RSO 1990, or under Part VIII, Environmental Protection Act RSO 1990. It is recognized that individual applications for small multi-lot/unit development in isolation from any other existing or proposed development may not be feasible on communal services or that the density associated with a particular development on communal services may not be desired. In the absence of official plan policy based on planning for sewage and water services, a servicing options statement can address the fundamental planning and servicing options at hand and ensure that informed decisions are made for community development that are consistent with the Comprehensive Set of Policy Statements. The servicing options statement can demonstrate how a particular development proposal(s) (and associated servicing) can fit most effectively into the existing community planning/servicing scenario and into any potential growth scenarios for the community.

A servicing options statement is not necessary for:

- development proposing connection to existing full municipal services within a designated settlement area, when it can be demonstrated that there is sufficient reserve sewage and water capacity as described in Section 2.2.2 of this guideline, or
- development proposing a servicing option that conforms to the existing official plan, where the official plan was prepared and approved in consideration of the principles described in this guideline and is consistent with the Comprehensive Set of Policy Statements.

Where applicable, the requirements of the municipal class environmental assessment process must be met (see *Municipal Engineers Association Class Environmental Assessment for Water and Wastewater Projects*, 1993).

The attached Appendix and Procedures form a part of this implementation guideline and should be read with the body of the implementation guideline.

APPENDIX

GLOSSARY

Default:

For the purposes of this document default describes the situation whereby communal services are not being operated or maintained in accordance with prescribed standards and the operator is unable or unwilling to comply with prescribed standards which may include non-compliance with the Terms and Conditions of the Certificate of Approval for the system or works.

Freehold Development:

For the purposes of this guideline freehold development means development proposals subject to Section 50 of the Planning Act and not subject to the Condominium Act.

Infill:

For the purposes of this guideline infill means development on vacant lots or undeveloped lots within a built-up area.

Multi-lot/unit Development:

For the purposes of this guideline multi-lot/unit development means more than five lots/units of residential, industrial, commercial or institutional development.

Multi-Year Sewage and Water Servicing Plan:

For the purposes of this guideline multi-year sewage and water servicing plan means a plan prepared by a municipality responsible for sewage and water servicing that recommends a framework for the servicing of future works and developments which are to be distributed geographically throughout a study area and implemented over an extended period of time. The plan should contain long-range servicing strategies and long-term growth management goals which can form a basis for the preparation of official plan policy. The plan should address the implications for existing services to serve anticipated growth, efficiency of existing infrastructure including conservation measures, physical and environmental constraints to development related to servicing, and ensure that new services support the goals of environmental protection, sustainability, urban intensification and growth management in an efficient and cost effective manner.

Sewage and Water Services:

Full Municipal Sewage and Water Services:

Means piped sewage and water services that are connected to a centralized water or wastewater treatment facility and provided by the municipality or another public body.

Communal Sewage and Water Services:

Generally mean sewage works and sewage systems and water works that can be described as small-scale satellite wastewater collection, treatment, and disposal facilities and water distribution, and possibly treatment, facilities using ground or possibly surface water as a source. Communal sewage services are separated from and unconnected to full municipal services which are connected to large centralized treatment plants that may serve entire municipalities. Communal sewage facilities can be comprised of gravity, pressure, or vacuum sewer collection systems, septic tank, secondary, tertiary, or stabilization pond treatment technologies, and discharge treated wastewater to either the surface of the ground, surface water, or subsurface environment.

For the purposes of this guideline and in keeping with existing legislation, "communal services" or "communal systems" mean **those sewage works, water works and sewage systems to be approved, or approved under Sections 52 & 53, Ontario Water Resources Act RSO 1990, or under Part VIII, Environmental Protection Act RSO 1990 for the common use of more than five units [in the total development area] of full-time or seasonal residential or industrial/commercial occupancy or other occupancy as determined by MOEE staff.**

Individual On-Site Sewage and Water Services/Systems:

Individual autonomous water supply and sewage disposal systems, that are owned, operated and managed by the owner of the property upon which the system is located and which do not serve more than five residential units/lots.

Public Communal Services:

Means sewage works and sewage systems, and water works that provide for the distribution, collection or treatment of sewage and water but which:

- are not connected to full municipal sewage and water services;
- are for the common use of more than five residential units/lots; and
- are owned, operated, and managed by either:
 - the municipality; or
 - another public body; or
 - where ownership by a municipality or another public body can not be achieved, by a condominium corporation or single owner through a responsibility agreement with the municipality or public body, which requires municipal/public body assumption of the communal services in the event of default.

Uncommitted Reserve Capacity:

See: Procedure D-5-1, *Calculating and Reporting on Uncommitted Reserve Capacity at Sewage and Water Treatment Plants*

